Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) An analyte chamber which can releaseably attached to a portable calibration unit, comprising:

a wick;

a liquid analyte absorbed in said wick;

a ~~housing having an open end~~ chamber comprising a mechanical iris defining an orifice, wherein said wick is internally disposed within said ~~housing~~ chamber;

~~a first layer disposed over and enclosing said open end;~~

headspace, wherein said headspace comprises ~~the~~ a volume within said ~~housing~~ chamber minus ~~the~~ a volume of said wick;

gaseous analyte disposed in said headspace;

wherein ~~said gaseous analyte is capable of passing through said first layer~~ when said orifice is closed an equilibrium exists between a gaseous concentration of said analyte in said head space and said liquid analyte absorbed in said wick.

2. (original) The analyte chamber of claim 1, wherein said analyte chamber cannot release said analyte in the liquid phase.

3. Canceled.

4. Canceled.

5. (currently amended) The analyte chamber of claim [[3]] 1, further comprising a

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plurality of analytes disposed in said wick.

6. (currently amended) A portable calibration apparatus, comprising:

a positive pressure assembly capable of providing a fluid at a pressure greater than atmospheric pressure;

a portable detector;

a fluid flow conduit ~~connected to~~ formed to include an aperture extending therethrough, wherein said fluid flow conduit interconnects said positive pressure assembly and said detector;

an analyte chamber ~~disposed adjacent said fluid flow conduit, wherein said analyte chamber comprises~~ comprising a mechanical iris defining an orifice, a wick and a liquid analyte ~~disposed~~ absorbed in said wick disposed within said chamber, and headspace comprising a volume of said chamber minus a volume of said wick, wherein said portable calibration apparatus cannot release said liquid analyte, wherein said orifice is in communication with said aperture, and wherein when said orifice is closed an equilibrium exists between a gaseous concentration of said analyte in said head space and said liquid analyte absorbed in said wick.

7. (original) The portable calibration apparatus of claim 6, further comprising a detector connected to said fluid flow conduit.

8. Canceled.

9. Canceled.

10. (currently amended) The portable calibration apparatus of claim [[9]] 6, further comprising:

a microprocessor; and

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a first feedback circuit interconnecting said microprocessor and said positive pressure assembly.

11. (original) The portable calibration apparatus of claim 10, wherein said fluid conduit comprises a first portion and a second portion, further comprising:

a valve interconnecting said first portion of said fluid conduit and said second portion of said fluid conduit;

a second feedback circuit interconnecting said microprocessor and said valve.

12. (currently amended) The portable calibration apparatus of claim 11, wherein said ~~first orifice~~ mechanical iris comprises an electromechanical ~~orifice~~ iris, further comprising a third feedback circuit interconnecting said microprocessor and said an electromechanical ~~orifice~~ iris.

13. (original) The portable calibration apparatus of claim 12, further comprising:

a heater, wherein said analyte chamber is capable of being removeably disposed in said heater;

a fourth feedback circuit interconnecting said microprocessor and said heater.

14. (currently amended) A method to calibrate a stationary gas detector, comprising the steps of:

providing a portable calibration apparatus comprising a positive pressure assembly, a portable detector, ~~and~~ an analyte chamber comprising a mechanical iris defining an orifice, a wick disposed within said chamber, and headspace comprising a volume of said chamber minus a volume of said wick, and a fluid flow conduit formed to include an aperture extending therethrough and connecting said positive pressure assembly with said portable detector;

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~~disposing~~ absorbing by capillary action a liquid analyte in said wick, such that all of said analyte is absorbed in said wick, and such that said wick cannot release said analyte in the liquid phase;

closing said orifice, wherein when said orifice is closed an equilibrium exists between a gaseous concentration of said analyte in said head space and said liquid analyte absorbed in said wick;

disposing said analyte chamber in said portable calibration apparatus such that said orifice is in communication with said aperture;

transporting said portable calibration apparatus to a stationary detector;

providing a concentration of said analyte in the gaseous phase to said portable detector;

measuring said concentration using said portable detector;

providing said gaseous analyte to said stationary detector;

calibrating said stationary detector using said concentration.

15. The method of claim 14, further comprising the steps of:

~~establishing (n) calibration levels;~~

~~setting (i) to 1;~~

providing ~~the (i)th~~ a first concentration of said gaseous analyte;

measuring said ~~(i)th~~ first concentration using said portable detector;

providing said ~~(i)th~~ first concentration of said gaseous analyte to said stationary detector;

calibrating said stationary detector using said ~~(i)th~~ first concentration;

providing a second concentration of said gaseous analyte;

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measuring said second concentration using said portable detector;

providing said second concentration of said gaseous analyte to said stationary detector;

calibrating said stationary detector using said second concentration;

~~determining if (i) equals (n);~~

~~operative if (i) is less than (n), incrementing (i) and repeating said providing, measuring, calibrating, and determining steps;~~

~~operative if (i) equals (n), ending the calibration process~~.

16. (original) The method of claim 14, wherein said detector further comprises a microprocessor, and wherein said portable calibration unit further comprises a positive pressure fluid assembly and a feedback circuit interconnecting said microprocessor and said positive pressure fluid assembly, said method further comprising the step of adjusting the fluid flow provided by said positive pressure fluid assembly.

17. (currently amended) The method of claim 14, wherein said analyte chamber further comprises ~~a mechanical orifice~~ an electromechanical iris, and wherein said portable calibration unit further comprises a feedback circuit interconnecting said microprocessor and said ~~mechanical orifice~~ electromechanical iris, said method further comprising the step of adjusting said ~~mechanical orifice~~ an electromechanical iris.

18. (original) The method of claim 14, wherein said portable calibration unit further comprises a heater and a feedback circuit interconnecting said microprocessor and said heater, wherein said analyte chamber can be removeably disposed in said heater, said method further comprising the step of adjusting the temperature of said heater.

19. (currently amended) An article of manufacture comprising a computer useable

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medium having computer readable program code disposed therein to adjust the available concentration of a gaseous analyte, wherein said article of manufacture comprises a portable detector, an analyte chamber ~~comprising a wick and a liquid analyte disposed in said wick~~ comprising a mechanical iris defining an orifice, a wick disposed within said chamber, liquid analyte absorbed in said wick, and headspace comprising a volume of said chamber minus a volume of said wick, wherein when said orifice is closed an equilibrium exists between a gaseous concentration of said analyte in said head space and a liquid analyte absorbed in said wick, and a positive pressure fluid assembly, wherein said article of manufacture is capable of providing a concentration of said analyte in the gas phase to said portable detector, the computer readable program code comprising a series of computer readable program steps to effect:

measuring a first concentration of said gaseous analyte emitted from said wick;

adjusting the flow rate of fluid provided by said positive pressure fluid assembly;

measuring a second concentration of said gaseous analyte.

20. (currently amended) The article of manufacture of claim 19, wherein said analyte chamber further comprises ~~a mechanical orifice~~ an electromechanical iris, said computer readable program code further comprising a series of computer readable program steps to effect adjusting the size of said ~~mechanical orifice~~ electromechanical iris.

21. (original) The article of manufacture of claim 20, further comprising a heater, wherein said analyte chamber can be removeably disposed in said heater, said computer readable program code further comprising a series of computer readable program steps to effect adjusting the temperature of said heater.

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